



COMUNICAZIONE ORALE

INTEGRATED CONTROL STRATEGIES FOR FOODBORNE OUTBREAK MANAGEMENT

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Foodborne diseases (FBDs) remain a major public health concern, requiring epidemiological investigations and coordinated action among multiple territorial prevention services. The aim of the present work was to describe the integrated management of a case of Shiga toxin-producing *Escherichia coli* (STEC) infection associated with tripe consumption and a hepatitis A virus (HAV) outbreak linked to bivalve molluscs, and to evaluate the contribution of multidisciplinary official controls to source identification and risk management. The management of two foodborne disease investigations conducted by the Local Health Authority (LHA) Napoli 1 Centro between November 2025 and May 2026 was evaluated. Epidemiological activities included case interviews, food exposure assessment, and traceability investigations, integrated with veterinary official controls, including food business operator (FBO) inspections and targeted sampling of food and environmental samples. For the STEC investigation, one cooked tripe sample from the implicated retail outlet, together with additional tripe and environmental samples collected at the associated processing facility by the competent LHA, were analysed for STEC. For the HAV outbreak, thirty-four official samples of bivalve molluscs collected from retail seafood establishments and restaurants were analysed for HAV. In the STEC investigation, epidemiological assessment identified tripe consumption as the most likely source of infection in an elderly patient hospitalized in critical condition. Traceability investigations linked the product to a processing establishment located within the jurisdiction of another LHA. STEC was detected in the sampled product, and environmental investigations revealed wide-

spread contamination of the processing facility. Consequently, production activities were immediately suspended, and the FBO was referred to the Judicial Authority for placing unsafe food on the market. In the HAV investigation, epidemiological analyses and case interviews identified the consumption of raw or lightly cooked bivalve molluscs as the main reported exposure among cases. More than 90 cases were reported within a few weeks in early 2026, representing a tenfold increase compared with previous years. HAV was detected in a retail batch of mussels originating from a local production area. This finding triggered a notification through the Rapid Alert System for Food and Feed (RASFF), enabling the prompt suspension of primary production and the associated purification and dispatch centres (PC/DC), where subsequent investigations confirmed HAV circulation. In parallel, a second sub-cluster linked to a single restaurant identified an HAV-positive FBO, suggesting secondary oro-faecal contamination during food handling. Based on the available findings, LHA Napoli 1 Centro recommended emergency public health measures, including restrictions on the serving of raw bivalve molluscs, and advice to consumers to avoid raw consumption at home. These investigations demonstrate that early source identification is essential to interrupt pathogen transmission. The integration of epidemiological investigations, veterinary official controls along the food chain, and laboratory analyses demonstrates the effectiveness of multidisciplinary collaboration in the early detection and control of foodborne outbreaks, providing a practical example of the One Health approach to managing public health emergencies at the local level.